elongated cross-section; and

a mounting portion for securing the connector to a substrate;

a plurality of signal contacts in said dielectric base, and comprising:

a mating portion for engaging a mating component, said mating portion being generally planar and having an elongated cross-section, said elongated cross-section of said mating portion of said signal contacts oriented generally transverse to said elongated cross-section of said mating portion of said ground or power contacts so that one end of said elongated cross-section is located adjacent one of said ground or power contacts and an opposite end of said elongated cross-section is located adjacent another one of said ground or power contacts; and

a mounting portion for securing the connector to a substrate; and

a plurality of solder masses, each secured to a respective one of said mounting ends of said plurality of ground or power contacts and said plurality of signal contacts for securing the connector to the substrate.

IN THE SPECIFICATION:

The Office Action dated February 12, 2001 indicates that the amendments to page 14, lines 13-26 made by Applicants in the Reply Under 37 C.F.R. §1.111 filed October 5, 1999 "would render printing difficult." The Office Action suggests that "[t]hese lines should be replaced by a single addition to be placed below line 12 and that includes all changes."

The Office Action further requests that the term "fused," as used in claim 18, line 19 and claim 32, be added to the specification, as its use "was discussed in paper no. 8 (4-19-00) and found properly included."

Accordingly, in response to both of the above issues, please replace the two paragraphs at page 14, line 13 to page 15, line 2 of the specification as originally filed, with the following two amended paragraphs. These two amended paragraphs contain all of the amendments previously requested in Applicant's Reply Under 37 C.F.R. §1.111 filed October 5, 1999, as well as a new

amendment to add the term "fused" where appropriate.

-- Longitudinally extending metallic grounding or power elements 436, 438, 440, 442, 444 and 446 are positioned between the rows of signal pins and extend perpendicularly from the base section. The plug also includes alignment and mounting pins 448 and 450 which enter corresponding openings (not shown) in a substrate (not shown) during mounting. On its bottom, or mounting, side the plug also includes a plurality of rows of solder conductive tabs to which solder masses, such as the solder balls 452 and 454 shown in Figure 26, secure (*i.e.*, are fused). As seen in Figure 33, the solder conductive tab of contact 434 is an angled portion 453 which resides in a recess 455 in the base. As customary in ball grid array assemblies, solder balls 452, 454, once reflowed, secure plug 420 to a substrate (now shown).

Referring to Figures 28-31, a receptacle which mates with the plug 420 is shown generally at numeral 456. This receptacle includes a base section dielectric 458, a peripheral bevelled edge 460 and rows of metallic pin receiving recesses as at 462, 464, 466, 468 and 470. Metallic grounding or power elements receiving structures 472, 474, 476, 478, 480 and 482 are interposed between the rows of pin receiving recesses. On its bottom, or mounting, side the receptacle also includes alignment and mounting pins 484 and 486 which enter corresponding openings (not shown) in a substrate (not shown) during mounting. Further, the bottom side of the receptacle includes rows of solder conductive pads to which solder masses, such as the solder balls 488 and 490 shown in Figure 30, secure (*i.e.*, are fused). As seen in Figure 33, the solder conductive pad of contact 470 is an angled portion 456 which resides in a recess 459 in the base. As customary in ball grid array assemblies, solder balls 488, 490, once reflowed, secure receptacle 456 to a substrate (not shown). From Figures 32-33 it will be observed that the same I-beam geometry as was described above is available with this arrangement. --

REMARKS

Claims 1, 2, 4-20, and 22-45 are pending in this application. Reconsideration of the grounds of rejection in the Office Action dated February 12, 2001 is respectfully requested.

I. Objections to the Specification

The specification has been amended to address the concerns raised on page 2 of the